In the claims:

14. An isolated Plasminute polynucleotide, wherein said polynucleotide encodes the polypeptide consisting of amino acids 1 to 207 of SEQ ID NO:54 or a polypeptide fragment thereof.

15. The polynucleotide of claim 14, wherein said polypeptide fragment comprises amino acids 1 to 207 of SEQ ID NO:54.

16. The polynucleotide of claim 14, wherein said polypeptide or polypeptide fragment thereof has biological activity.

17. The polynucleotide of claim 16, wherein said biological activity is serine protease activity.

18. The polynucleotide of claim 16, wherein said biological activity is inhibition of serine protease activity.

19. The polynucleotide of claim 14, wherein said polynucleotide consists of nucleotides 1044 to 1667 of SEQ ID NO:53, or is a fragment thereof.

20. A polynucleotide, wherein said polynucleotide consists of nucleotides 1 to 1036 of SEQ ID NO:53, or is a fragment thereof.

21. A polynucleotide, wherein said polynucleotide consists of nucleotides 1037 to 1865 of SEQ ID NO:53, or is a fragment thereof.

22. The complement of the polynucleotide of claim 14, wherein said polynucleotide consists of nucleotides 1044 to 1667 of SEQ ID NO:53, or a fragment thereof.

23. The complement of the polynucleotide of claim 20, wherein said polynucleotide consists of nucleotides 1 to 1036 of SEQ ID NO:53, or a fragment thereof. .

24. The complement of the polynucleotide of claim 21, wherein said polynucleotide consists of nucleotides 1037 to 1865 of SEQ ID NO:53, or a fragment thereof.

25. An expression vector comprising the polynucleotide of claim 14, operably linked to a promoter.

26. A composition comprising the polynucleotide of claim 14 and a physiologically acceptable carrier.

27. A host cell recombinant for the polynucleotide of claim 14.

28. A non-human transgenic animal recombinant for the polynucleotide of claim 14.

29. An isolated polynucleotide comprising an open reading frame of the human cDNA of deposited clone 789749_182-14-3-0-C12-F.

30. A Plasminute polypeptide encoded by the polynucleotide of claim 29.

31. A Plasminute polypeptide consisting of amino acids 1 to 207 of SEQ ID NO:54, or a polypeptide fragment thereof.

32. The polypeptide fragment of claim 31, wherein said polypeptide fragment comprises amino acids 1 to 207 of SEQ ID NO:54.

33. The polypeptide or polypeptide fragment of claim 31, wherein said polypeptide or polypeptide fragment has biological activity.

34. The polypeptide or polypeptide fragment of claim 33, wherein said biological activity is serine protease activity.

35. The polypeptide fragment of claim 33, wherein said biological activity is inhibition of serine protease activity.

36. A composition comprising the polypeptide of claim 31 and a physiologically acceptable carrier.

37. A method of making a Plasminute polypeptide, said method comprising:

a) providing a population of cells comprising a polynucleotide encoding the Plasminute polypeptide of claim 31, operably linked to a promoter;

b) culturing said population of cells under conditions conducive to the production of said polypeptide within said cells; and

c) purifying said polypeptide from said population of cells.

38. The method of claim 37, wherein said polynucleotide consists of nucleotides 1044 to 1667, or is a fragment thereof.

39. An antibody that specifically binds to the polypeptide of claim 31.

40. The antibody of claim 39, wherein said antibody binds to Plasminute but not to plasmin resulting from proteolytic cleavage of plasminogen at the Arg561-Val562 bond.

41. The antibody of claim 39, wherein said antibody neutralizes serine protease activity.

42. The antibody of claim 40, wherein said antibody neutralizes serine protease activity.

43. A method of binding the polypeptide of claim 31 to the antibody of claim 39, comprising contacting said antibody with said polypeptide under conditions in which said antibody can specifically bind to said polypeptide.

44. A method of detecting a Plasminute gene product in a biological sample comprising the steps of:

a) obtaining said biological sample from a mammal;

b) contacting said biological sample with the antibody of claim 39; and

c) detecting the presence or absence of binding of said antibody to a protein within said sample;

wherein a detection of said binding indicates that Plasminute gene product is expressed in said biological sample.

45. A method of determining whether Plasminute gene is expressed in a biological sample, comprising the steps of:

a) obtaining said biological sample from a mammal;

b) contacting said biological sample with the polynucleotide of claim 23;

c) detecting the presence or absence of hybridization between said polynucleotide and an RNA species within said sample;

wherein a detection of said hybridization to said polynucleotide of claim 23 indicates that Plasminute gene is expressed in said biological sample.

46. The method of claim 45, wherein said polynucleotide is a primer, and wherein said hybridization is detected by detecting the presence of an amplification product comprising the sequence of said primer.

47. A method of identifying a candidate modulator of a Plasminute polypeptide or polypeptide fragment, said method comprising:

a) contacting the polypeptide or polypeptide fragment of claim 31 with a test compound; and

b) determining whether said compound specifically binds to said polypeptide or polypeptide fragment;

wherein a detection that said compound specifically binds to said polypeptide or polypeptide fragment indicates that said compound is a candidate modulator of said Plasminute polypeptide or polypeptide fragment.

48. A method for the production of a composition, comprising:

a) identifying a candidate modulator of a Plasminute polypeptide or polypeptide fragment using the method of claim 47; and

b) combining said modulator with a physiologically acceptable carrier.

49. A method of identifying a candidate modulator of a Plasminute polypeptide or polypeptide fragment, said method comprising:

a) contacting the polypeptide or polypeptide fragment of claim 31 with a test compound; and

b) determining whether said compound specifically binds to said polypeptide or polypeptide fragment, but not to plasmin resulting from proteolytic cleavage of plasminogen at the Arg561-Val562 bond;

wherein a detection that said compound specifically binds to said polypeptide or polypeptide fragment, but not to plasmin resulting from proteolytic cleavage of plasminogen at the Arg561-Val562 bond, indicates that said compound is a candidate modulator of said Plasminute polypeptide or polypeptide fragment.

50. A method for the production of a composition, comprising:

a) identifying a candidate modulator of a Plasminute polypeptide or polypeptide fragment using the method of claim 49; and

b) combining said modulator with a physiologically acceptable carrier.

51. A method of using the Plasminute polypeptide of claim 34 to assign function to a specific proteolytic fragment of a heterologous protein, said method comprising:

a) contacting said heterologous protein with said Plasminute polypeptide;

b) generating said specific proteolytic fragment of said heterologous protein by said Plasminute serine protease activity; and

determining whether said proteolytic fragment of said heterologous protein possesses said function.

52. A method of using the Plasminute polypeptide of claim 34 to map an antigenic epitope onto a specific proteolytic fragment of a heterologous protein, said method comprising:

a) contacting said heterologous protein with said Plasminute polypeptide;

b) generating said specific proteolytic fragment of said heterologous protein by said Plasminute serine protease activity; and

c) determining whether said proteolytic fragment of said heterologous protein possesses said antigenic epitope.